

## REMARKS

### INTRODUCTION

In accordance with the foregoing, claim 5 has been amended and claims 1-4 have been canceled, without prejudice or disclaimer. The amendment to claim 5 does not raise any new issues, but merely corrects a typographical error to avoid a potential 35 USC 112 issue. Entry and consideration is respectfully requested.

Claims 5-20 are pending and under consideration.

### REQUEST FOR NEW OFFICE ACTION

It is respectfully submitted that the outstanding Office Action is improper for not addressing all the claim elements of each claim.

As only an example, independent claim 5 sets forth:

"a video encoder unit to encode, when the digital broadcasting channel is selected, the MPEG processed video signal and the additional information into an encoded analog video signal according to a second control signal of the plurality of control signals and the synchronous signal"

The Office Action on page 7 appears to indicate that features not directly discussed under the rejection of claim 5 have previously been discussed under the rejection of claim 1, stating "[c]onsidering claim 5, the features of claim 5, which correspond with subject matter mentioned above in the rejection of claim 1, are likewise treated."

However, the canceled claim 1 did not include the above example feature of claim 5, i.e., encoding during the digital broadcasting operation of claim 1 did not require the MPEG processed video signal and the additional information to be encoded into an analog signal according to a second control signal **and the synchronous signal** derived from the received analog signal.

Further, the rejection of claim 5 on pages 7 and 8 does not address this further required encoding of the MPEG processed video signal and the additional information according to the synchronous signal.

Thus, the Office Action is improper for not addressing all the claimed features. A new Office Action addressing all claim features is respectfully requested.

## REJECTION UNDER 35 USC §103

Claims 5, 7-12 and 14-16 stand rejected under 35 USC §103(a) as being unpatentable over Bestler et al., U.S. Patent No. 5,638,112, in view of Tessier, U.S. Patent No. 5,146,336; and claims 6, 13 and 17 stand rejected under 35 USC §103(a) as being unpatentable over Bestler et al., and Tessier, and further in view of Achiha, U.S. Patent No. 4,530,004. These rejections are respectfully traversed.

It is respectfully submitted that none of Bestler et al., Tessier, nor Achiha disclose or suggest at least the aforementioned "a video encoder unit to encode, when the digital broadcasting channel is selected, the MPEG processed video signal and the additional information into an encoded analog video signal according to a second control signal of the plurality of control signals and the synchronous signal," as recited in claim 5. Independent claim 11 similarly sets forth a claimed "video encoder to encode a video signal from the digital broadcasting signal and the additional information according to the separated synchronous signal."

In rejecting canceled claim 1, which set forth "encoding the additional information according to the extracted synchronous signal and analogizing the encoded additional information", the Office Action had combined a synchronous capturing and use in overlaying data of Tessier with the system of Bestler et al. to create the then claimed "encoding the additional information according to the extracted synchronous signal and analogizing the encoded additional information."

In particular, the Office Action on page 5 sets forth "Tessier teaches extracting a sync signal from a received composite video signal and using the extracted sync signal in order to accurately insert or overlay a locally generated signal onto the instant received composite video signal."

As noted in the Office Action Tessier only sets forth using a sync from an input analog signal with another analog locally generated signal.

Tessier also only sets forth using the sync with the analog locally generated signal within the same frame, e.g., for picture in picture or channel numbers "switched in" to replace corresponding pixels of the input signal. At a precise location on the screen, and through precise timing of each frame, the output would be switched from the input analog signal to the locally generated signal.

Tessier fails to disclose or suggest that a sync from one input analog signal should be used

during the display of a different input signal. Further, Tessier fails to disclose or suggest that a sync from one input analog signal should be used during the display of a different input digital signal.

The system of Tessier is directed toward preventing a "jitter" within a frame when a locally generated signal is switched, from the input signal, to for output. Since the locally generated signal is meant to be shown within the same frame and at the same time as the input signal Tessier teaches that there may be jitter if the locally generated signal has a different sync than the input signal that is to be simultaneously displayed.

Conversely, the claimed video encoder uses the sync from a first broadcasting signal for the encoding of the additional information to be displayed within a second broadcasting signal.

Thus, in the claimed arrangement, the suggested "jitter" of Tessier would not occur.

Accordingly, even if the relied upon teaching of Tessier were used to modify Bestler et al. the same would not disclose the claimed video encoders.

The only way that Bestler et al. could arguably be modified would be to use the sync from the input analog signal for encoding the additional information during output of the analog signal. Further, arguably, a strained interpretation of the teaching of Bestler et al. regarding the input digital broadcasting signal could similarly only potentially suggest using a sync of the digital broadcasting signal for encoding the additional information during output of the digital broadcasting signal.

There is no disclosure or suggestion in the record why one skilled in the art would use sync information from an analog broadcasting signal when outputting a different digital broadcasting signal.

The relied upon Achiha similarly fails to disclose or suggest such a deficient feature.

Therefore, it is respectfully submitted that independent claims 5 and 11 are in allowable condition. Similarly, for at least their respective features and their dependence from independent claims 5 and 11, it is respectfully submitted that claims depending from claims 5 and 11 are also in allowable condition.

Claims 18-20 stand rejected under 35 USC §103(a) as being unpatentable over Devaney et al., U.S. Patent No. 6,357,045, in view of Cummins et al., U.S. Patent No. 5,784,120. This rejection is respectfully traversed.

The outstanding Office Action recites that "[c]learly Devaney is directed to switching between analog and digital signals, and may for example decode a digital stream in order to produce an analog feed," citing Devaney et al. in col. 6, lines 7-62, col. 9, lines 25-30, and col. 10, lines 50-65.

As previously noted, the cited portions of Devaney et al. merely state that when two video sources feeds are to be simultaneously displayed, the analog video signal is converted into MPEG format, so that both the converted MPEG version of the analog video signal and an already MPEG format second video source can be simultaneously displayed.

Accordingly, the only manner Devaney et al. could be interpreted to meet the claimed "a tuning unit to selectively receive one of a broadcasting signal, including a second digital broadcasting signal, after previously tuning and receiving a first analog broadcasting signal, and a second analog broadcasting signal, after previously tuning and receiving a first digital broadcasting signal" would be if a first analog or digital source first displayed is then displayed together with another second digital or analog source, respectively.

However, with such an interpretation of Devaney et al. and with the underlying operation of Devaney et al., the remainder of the claimed features cannot be met by Devaney et al.

Here, for example, in Devaney et al., any input analog signal is then converted to MPEG format and thereafter simultaneously displayed with another MPEG format signal. Alternatively, an input MPEG signal may apparently first be converted to an analog format and then thereafter simultaneously displayed with another analog format signal.

Thus, at no time would Devaney et al. separately switch between two MPEG signals (one being an MPEG converted input analog signal and another being an input MPEG signal) or switch between two analog signals (one being an input analog signal and another being an analogized input MPEG signal).

In addition, as noted, independent claim 18, for example, claims:

"a processing unit to selectively process the second digital broadcasting signal and the second analog broadcasting signal in accordance with the selection by said tuning unit, and to

selectively synchronize phases of the second digital broadcasting signal with the first analog broadcasting signal and the second analog broadcasting signal with the first digital broadcasting signal, respectively, preventing jittering from occurring in output video upon the tuning unit changing selection between the first digital broadcasting signal and the second analog broadcasting signal, or between the first analog broadcasting signal and the second digital broadcasting signal."

However, in addition to the failure of Devaney et al. to disclose the claimed switching, in Devaney et al. only digital MPEG signals would be synchronized or only analog signals would be synchronized.

Thus, in addition to the above lacking of switching between analog to digital broadcasting signals, or digital to analog broadcasting signals, Devaney et al. also fails to disclose or suggest the claimed synchronizing.

Still further, to disclose the claimed prevention of jitter "from occurring in output video upon the tuning unit changing selection between the first digital broadcasting signal and the second analog broadcasting signal, or between the first analog broadcasting signal and the second digital broadcasting signal," the Office Action relies upon Cummins et al.

The Office Action states on page 3 of the Office Action that "the Examiner asserts that as Cummins overcomes jitter (which adversely affects the resolution of the image)... in the A/D converter this solution is not limited [to] the A/D converter, since as a result the resolution of the image is improved, which is consistent with the claimed invention."

However, as noted in previous responses, this "jittering" of Cummins et al. cannot be interpreted as meeting the claimed "preventing jittering" to be jittering "occurring in output video upon the tuning unit changing selection between" signals.

**The jittering avoided by Cummins et al. is not regarding or even associated with any switching between signals.**

It is respectfully submitted that when the underlying disclosure of Devaney et al. is reviewed as it must be interpreted to read on portions of independent claims 18 and 20, Devaney et al. cannot be interpreted as reading on all the claim elements relied upon in the Office Action.

Similarly, based upon the actual disclosure of Devaney et al. and any potential teaching of Cummins et al., such deficient features similarly cannot be met by the proposed combination.

Still further, the Office Action relied upon "preventing jittering" of Cummins et al. cannot be interpreted as reading on the claimed "preventing jittering from occurring in output video upon the tuning unit changing selection between..."

Accordingly, it is respectfully submitted that the Office Action proposed combination of Devaney et al. and Cummins et al. cannot meet all the claimed features of any of claims 18-20, as suggested in the Office Action.

Withdrawal of this rejection and allowance of claims 18-20 is respectfully requested.

#### CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

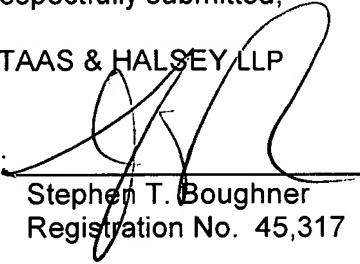
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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